Application No. 09/849168 (Docket: DT.0101)
37 CFR 1.111 Amendment dated 09/09/2005
Reply to Office Action of 06/21/2005

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0002] with the following amended paragraph:

[0002] This application is related to co-pending U.S. Patent Application Serial Number 09/849621——————— (Docket DT:0102, entitled *Apparatus for Merchandise Promotion Optimization*, having a common assignee, common inventors, and filed on the same day as this application.

Kindly replace paragraph [0061] with the following amended paragraph:

[0062] Now referring to FIGURE 2, a block diagram 200 is presented illustrating an apparatus for merchandise price optimization according to the present invention. The block diagram 200 shows an optimization network operations center (NOC) 230 that is accessed over a data network 220 by a plurality of off-site computers 210 belonging to a plurality of customers. In one embodiment, the data network 220 is the Internet 220 and the off-site computers 210 are executing a Transport Control Protocol (TCP)/Internet Protocol (IP)-based thin web client application 211 such as ~~Microsoft~~MICROSOFT® ~~Internet Explorer~~INTERNET EXPLORER® or ~~Netscape~~NETSCAPE® ~~Navigator~~NAVIGATOR®. In an alternative embodiment, the computers 210 execute an additional client application for executing distributed applications such as ~~Citrix~~CITRIX® ICA® Client 211. The optimization NOC 230 has a firewall 231 through which data network packets enter/exit the NOC 230. The firewall 231 is coupled to a web server 232. The web server 232 provides front-end services for a scenario/results processor 233. The scenario/results processor 233 is coupled to an optimization engine 234, an activity based cost (ABC) standards data base 237, and a customer data base 238. The customer data base 238 provides storage for data sets 239 corresponding to a plurality of customers. The optimization engine 234 interconnects to an activity based cost engine 235 and a demand engine 236. The activity based cost engine 235 is coupled to the ABC standards data base 237 and the demand engine 236 is coupled to the customer data base 238

Please replace paragraph [0062] with the following amended paragraph:

Application No. 09/849168 (Docket: DT.0101)
37 CFR 1.111 Amendment dated 09/09/2005
Reply to Office Action of 06/21/2005

[0062] In operation, each of the customers maintains a protected data set 239 within the customer data base 238. Point of sale data is uploaded over the data network 220 from files on the customer computers 210 into corresponding data sets 239 within the data base. The scenario/results processor 233 controls the timing and sequence of customer activities for uploading data, configuring optimization scenarios, setting rules and constraints, and downloading optimization results for display on the client computers 210. In one embodiment, the scenario/results processor 233 builds Hypertext Markup Language (HTML) web pages for transmittal over the data network 220 to the clients 210. In an alternative embodiment, the scenario/results processor 233 builds Extensible Markup Language (XML) pages for distribution to the clients 210. ~~In a Java~~In a JAVA®-based embodiment, the scenario/results processor 233 builds, processes, and distributes ~~Java applets~~JAVA applets to the clients 210.

Please replace paragraph [0071] with the following amended paragraph:

[0071] In operation, the optimization management logic 302 interprets an optimization scenario configured by a user to direct the retrieval and/or upload of data from the client computer, and the receipt of customer data from the demand engine and ABC standards data from the ABC engine in accordance with the type of optimization that is being performed. The price optimization tool 304 is employed to determine a set of optimum prices for products of a product category comprising a plurality of demand groups. The promotion optimization tool 306 is employed to determine an optimum promotion strategy for products of a product category comprising a plurality of demand groups. The space tool 308 is employed to determine an optimum placement strategy within stores for products of a product category comprising a plurality of demand groups. The logistics tool 310 is employed to determine an optimum inventory strategy within stores for products of a product category comprising a plurality of demand groups. And the assortment tool 312 is employed to determine an optimum mix of products of a product category comprising a plurality of demand groups. Each of the tools 304, 306, 308, 310, 312 include provisions for determining optimum lever parameters for the maximization of cost-based merchandising figures of merit such as net profit. In one embodiment, the optimization engine 300 comprises computer program modules coded for execution by an

Application No. 09/849168 (Docket: DT.0101)
37 CFR 1.111 Amendment dated 09/09/2005
Reply to Office Action of 06/21/2005

optimization analysis program such as GAMS®. The results of an optimization are exported from the application program as tables into a data base server application such as ~~Microsoft~~MICROSOFT® SQL Server.

Please replace paragraph [0073] with the following amended paragraph:

[0073] Operationally, the transaction logic 402 provides application level message services for the scenario/results processor 402 to receive/transmit messages from/to clients via the web server. In one embodiment, sessions are established via conventional socket calls according to MICROSOFT~~Microsoft®~~ ~~Windows~~ WINDOWS NT® operating system. The input/output processor 404 directs the acquisition of client data to define parameters of an optimization scenario and directs the distribution of scenario results to the clients. The command interpretation logic 406 utilizes a series of scenario configuration templates, or new scenario templates, provided by the template controller 405 to enable a user to configure parameters of a optimization scenarios for execution. The new scenario templates, or windows, are stored in the screen templates data set 410, and are populated with appropriate configuration option data by the command interpretation logic 406. The input/output processor 404 routes these templates to the transaction logic 402, whereby the templates are routed to the user client machines over the data network. The command interpretation logic 406 includes interactive data acquisition logic 408 and file acquisition logic 407. The interactive data acquisition logic 408 is employed to populate selected scenario configuration templates with fields/parameters whereby a user interactively provides data required to configure a scenario or to display the results of an executed scenario. The file acquisition logic 407 is employed to control the reception of electronic files from a client machine required to configure a scenario and to control the transmission of files to export results of an executed scenario to a client machine. The scenario attributes format data set 409 describes the format requirements for product attribute data so that data received by the command interpretation logic 406 can be manipulated into formats that comport with each of the optimization tools 304, 306, 308, 310, 312 described with reference to FIGURE 3.

Page 4 of 18

Application No. 09/849168 (Docket: DT.0101)
37 CFR 1.111 Amendment dated 09/09/2005
Reply to Office Action of 06/21/2005

Please replace paragraph [00129] with the following amended paragraph:

[00129]   In addition, the present invention has been particularly characterized in terms of servers, controllers, and management logic for optimization of various merchandising parameters.   These elements of the present invention can also be embodied as application program modules that are executed on a ~~Windows~~ WINDOWS NT®- ~~or Unix~~ or UNIX®-based operating system.